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Regional Oil and Gas Workshop Tokyo, Japan

Report on Workshop Findings and Follow-up Activities

The World Bank

Industry and Energy Department

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Contents

Preface

The World Bank and the Export-Import Bank of Japan (J-Exim), along with five Japanese trading companies, cosponsored the Regional Oil and Gas Workshop, held June 16–17, 1994, at the headquarters of J-Exim in Tokyo. The goals of the meeting were, first, to provide a forum for reaching a consensus on topics important to the development of the oil and gas sector in selected countries with emerging market economies (EEs) in Eastern Europe and Asia, and, second, to specify follow-up activities to promote efficient oil and gas sector development.

The workshop's discussions centered on the privatization of state-owned gas entities as a means of improving efficiency and enhancing resource mobilization; financing mechanisms for attracting greater foreign private sector investment in the oil and gas sector; and the potential for expanded oil and gas trade in the Asia region. The topics were selected through a dialogue with the various participating countries, representatives from the international oil and gas industry, and the staff of the World Bank and other international development institutions. Annex 1 reproduces the workshop's agenda for the discussion of these topics.

Among the 55 participants were 16 representatives of 12 EEs. In addition, four multilateral organizations took part in the workshop—the Asian Development Bank, the European Bank for Reconstruction and Development (EBRD), and two members of the World Bank Group—the International Bank for Reconstruction and Development (IBRD) and the International Finance Corporation (IFC). The representation from the private sector was diverse, covering six Japanese trading companies, seven international oil companies, two banks, two management consulting firms, one law firm, and one research institute. Annex 2 lists the participants and their respective affiliations.

The workshop was organized as a result of close collaboration of the World Bank, J-Exim, and Marubeni. The manager and the staff of the Industry and Energy Department, Oil and Gas Division (IENOG) of the World Bank were closely associated with all phases of the work.

Mr. Mohsen Shirazi, senior gas specialist in IENOG, served as the workshop's task manager, assisted by Messrs/dames Shigeru Kubota, Bent Svensson, Shirly Rajan, and Matthew Mitchell (consultant), all of IENOG. Messrs. S. Shimamoto, Y. Ohmit, and T. Maeda from Japan Exim Bank, along with Messrs. H. Ogawa, S. Matsuda, and T. Fukuda of Marubeni, supported the entire effort; special thanks are expressed for their hard work.

Mr. Richard Stern, director of IEN, chaired the workshop, and Mr. M. Agata, special advisor to the governor of J-Exim, gave a substantive keynote address. The moderators, Messrs. J. Brown and A. Oduolowu, made valuable contributions to the

workshop discussions, and the main speakers and international participants at the workshop provided extremely useful perspectives.

This report on the workshop's proceedings summarizes the main findings that emerged from the papers and discussions and provides a brief description of follow-up activities that have developed in response to these findings. Publication of the report was managed by Mr. Paul Wolman of IEN, with word processing assistance from Ms. Carole-Sue Castronuovo.

Abbreviations and Acronyms

bcm	billion cubic meters
CNPC	China National Petroleum Company
EBRD	European Bank for Reconstruction and Development
ECO	Expanded Co-Financing Program
EE	emerging (market) economy
IBRD	International Bank for Reconstruction and Development
IFC	International Finance Corporation
J-Exim	Export-Import Bank of Japan
MIGA	Multilateral Investment Guarantee Agency
MOL Rt.	Hungarian Oil and Gas Company
mtpy	million tons per year
SOE	state-owned enterprise

Executive Summary

1 The Regional Oil and Gas Workshop in Tokyo was a successful first step in identifying the assistance needs of selected countries of Eastern Europe, Russia, and Asia in implementing privatization and restructuring programs, securing the necessary financing for oil and gas investment needs, and evaluating the potential for oil and gas trade within the Asia Region.

2 Two unique aspects of the workshop's organization contributed to its success. First was its location: the choice of Tokyo as a venue, along with Japanese co-sponsorship of the workshop, and the strong representation of the Japanese private sector, indicated a major Japanese interest in developing a closer working relationship with the World Bank and the participating countries. Japanese donors have further demonstrated their interest by financing some of the follow-up activities to the workshop. Second was the fact that the workshop brought together a wide variety of participants—countries with large, growing industrial energy consumption, important oil and gas producers, and private and public sector entities interested in regional oil and gas development.

3 The diversity of participants' backgrounds enriched the dialogue about each other's concerns in mobilizing financing for oil and gas sector investments in EEs. The conclusions of the workshop cover four main areas: elements that make for effective privatization practice; the importance of technical assistance in privatization practice; the need for special financing mechanisms to attract private investment; and the potential for the development of oil and gas trade in the Asia region.

Privatization Practice

4 Most of the participants in the workshop agreed that the main driving forces for privatization should be efficiency and resource mobilization. They also seemed to share similar views on the principles of the privatization process, such as adhering to economic criteria as the basis for decisionmaking and maintaining objectivity and transparency in the implementation of privatization goals.

5 There was some divergence in views on the role of the state in the oil and gas business. Representatives of the private sector indicated that they could work under a variety of sector structures as long as the country had certain prerequisites of a business environment and a clear, stable framework for business operations. Other participants stressed the importance of getting the state out of the oil and gas business entirely, as soon as possible, given the inherent conflict of the state's operating a business in a sector where it also played a regulatory role. However, case studies and the shared experience of EEs attending the workshop indicated that in many EEs, the state is likely to maintain at least a minority interest in the oil and gas business in the near to medium term.

6 Overall, the main concern of most EEs in privatization practice seemed to be practical advice on certain difficult aspects of privatization, such as deciding on the most suitable form of privatization, determining the appropriate role for the state in the oil and gas sector, and coping with the socioeconomic aspects of the labor shedding that often results from the corporate restructuring associated with privatization.

7 One way of addressing these concerns is for officials in the oil and gas sector of EEs in the initial phases of privatization to visit countries that have successful privatization experience and discuss this experience on an informal, first-hand basis. The Bank has helped facilitate such an arrangement between Argentina and China.

Financing Oil and Gas Sector Development

8 Two key points emerged from the presentations and discussions on the financing of oil and gas sector development in EEs. The first is that EEs cannot rely on the lending programs of international development agencies to meet the bulk of their financing needs because of the size of the investment and the limited funds available from development institutions for oil and gas projects. Official development agencies will only be able to provide at most 5 to 10 percent of the investment requirements of the oil and gas sector in EEs, roughly US$100 billion annually. The rest will have to come from private domestic funds and foreign investment resources.

9 The second point raised is that special financing mechanisms will be necessary to help many EEs secure external debt capital from private sources because EEs often lack sufficient domestic capital markets, and foreign private investors are often hesitant to commit resources because of perceived sovereign risks. Financing mechanisms, such as guarantees, are growing in importance as part of the financial assistance framework of international development agencies. The World Bank has now introduced a guarantee mechanism that is expected to facilitate private sector financing of oil and gas projects. Also, the Bank is looking into mechanisms to mobilize "non-dollar-based" private sector funds, particularly the large savings of Japanese institutional investors.

Oil and Gas Trade Potential in the Asia Region

10 Energy demand in the Asia region is growing faster than that of any other region in the world. The region relies for most of its oil and gas supplies on the Middle East and Indonesia. However, Central Asia has a large potential for oil and gas production, and imports from these countries could be desirable for other Asian countries, which could thereby diversify supply sources and enhance security. In addition, transit countries would benefit from royalties that would result from the large pipelines that would be necessary to link producers with major markets.

11 The infrastructure requirements for trade development would necessitate multilateral investment projects; these would involve creating a special institutional

framework that would include, among other things, investment protection treaties, assurances of fiscal stability, mechanisms for resolving transjurisdictional disputes, market-driven pricing mechanisms, harmonization of technical standards, and guarantees for the repatriation of profits.

12 The workshop's discussion of trade potential pointed to the need for preinvestment studies and the formation of multilateral working groups to facilitate multilateral decisionmaking on trade development. As a preliminary step in this decisionmaking process, the World Bank has launched an initiative to evaluate options for exporting oil and gas from Central Asian countries. A desk study will assess oil and gas demand and supply; explore possible export schemes to markets in Europe, Turkey, and Asia; and evaluate the status of existing oil and gas transport infrastructure and identify additional infrastructure requirements. The study will also summarize the status of discussions on future projects and prepare a concrete proposal for a second-stage study. Subject to the findings of the desk study and the discussions of a special steering committee to review it, a second-stage study will follow, covering cover pricing issues and preinvestment evaluation.

1

Privatization: The Rationale and the Process

Key Points

- The driving forces of privatization are the needs to promote efficiency and mobilize resources.
- Privatization has a variety of forms and stages, whose scope and sequence depend on sector goals and the overall country economic situation.
- Two special concerns driving privatization in the oil and gas sector are the nonrenewable nature of resources and the importance of the sector to a country's balance of payments.
- The basic principles of the privatization process are concentration on economic criteria, objectivity, and transparency.
- The legal framework often needs special consideration in EEs and serves as the cornerstone of a sound business environment.
- In restructuring for privatization, considerable concern will arise about how to handle the social burden of labor shedding.
- Views differ on the role of the state in the oil and gas business. Many feel that the state has not managed the sector efficiently according to commercial principles; that its simultaneous role as entrepreneur and regulator leads to an inherent conflict of interest; and that, for these reasons, the state should step aside from the oil and gas business entirely, as soon as possible. However, others note examples of state oil and gas enterprises that operate on commercial principles and argue that for such enterprises gradual privatization could prove a viable option.
- Countries have diverse experiences with privatization in the region and related assistance needs.

Driving Forces

1.1 The basic driving forces of privatization are unsatisfactory commercial performance of the state enterprise and the need for greater efficiency and resources to make state oil companies profitable and competitive in the world oil market. Most state-owned enterprises (SOEs) experience poor financial results, high costs, cash-flow problems, investment capability dependent on governmental decisionmaking, lack of economic performance criteria, political interference, isolation from capital markets, price distortions, and little incentive for efficiency.

Forms and Stages of Privatization

1.2 Privatization takes many forms, some of them not involving direct changes in the ownership or structure of the existing SOE. Examples of this type of privatization are opening the sector for exploration by international oil companies, contracting out certain services to the private sector, and transferring management control without changing ownership. However, changes in ownership and corporate restructuring are often necessary to bring about desired changes in efficiency and resource mobilization. The workshop presentations focused mainly on privatization that partially or fully divests the state of oil and gas business ownership and operations and involves some company restructuring.

Special Concerns of Privatization in the Oil and Gas Sector

1.3 Most governments regard oil and gas reserves as belonging to the nation as a whole, and when a state company is privatized it is crucial to ensure a proper sharing of benefits between the company and the state. Another major consideration is the nonrenewable nature of oil and gas resources; this adds to the importance of efficient extraction and economic pricing. Furthermore, the oil and gas sector often plays a considerable role in a country's balance of payments.

Basic Principles of the Privatization Process and Important Steps in Implementation

1.4 First, it is crucial to base the entire process on economic principles and avoid politicizing the process. Second, it is important to maintain objectivity. Third, all decisionmaking and transactions should be transparent, giving the public access to key pieces of information. Important steps in the process that are very important to success but that governments often do not take are strong commitment to objectives and the aforementioned principles, adherence to a fixed time period for completion of the process, sufficient provisions for the day-to-day management of the transition, and assignment of clear ministerial responsibility for the privatization.

Importance of the Legal Framework

1.5 The legal framework is important because most private investors will look for clear rules of sector operation that make investment attractive. Some general criteria for a good legal and regulatory framework are clarity combined with flexibility, assurance of no new risks or surprises, and procedures that generally appear fair to all parties involved. A basic legal framework covers contract law; the status of organizations, such as joint ventures and stock companies; freedom to enjoy property (i.e., selling shares and assets, expatriating profits, and so on); and a mechanism for dispute resolution. Many countries require the enactment of laws to abolish the monopoly of the state oil company, strengthen capital markets to support private entrepreneurs, and define the rules of how privatization will take place. Also, after the completion of the privatization transaction, legal safeguards may be necessary to ensure that all parties comply with the terms of privatization agreements.

Role of the State in the Oil and Gas Sector

1.6 The workshop's presentation on the privatization process and much of the related discussions focused on whether the state should maintain some involvement in the oil and gas business. A key point of the presentation was that a major reason for privatizing the oil and gas industry should be to get the state out of the oil and gas business, because, first, most state oil companies do not operate efficiently, and their presence in the sector can deter competition; and, second, an inherent conflict arises when a government exercises a regulatory role in the sector and also operates a business that it regulates. However, some participants cited examples of state enterprises that operate efficiently, according to commercial principles, noting that in some circumstances, a gradual transition may be desirable, especially in countries with newly formed market economies and no history of a private sector.

2

Restructuring and Privatization: Case Studies and Lessons of Experience

Key Points	❑ In the case of China's national petroleum company, CNPC, important drivers of change are present, but the company is burdened by an insufficiently sound business environment, cumbersome bureaucratic procedures, lack of familiarity in working with consultants, and inadequate access to data. People and management have hindered progress in restructuring and privatization. ❑ In the case of Hungary's national oil and gas company, MOL Rt., the lack of strong commitment by the government and company management to change has limited the effectiveness of restructuring. ❑ The key lessons are the importance of clear need for change and commitment to it; a vision of the changed entity and a timely implementation plan for achieving it; a willingness to take risks and accept responsibility for them; and clear communications among the key players in the restructuring and privatization process.

2.1 The workshop presented case studies on restructuring and privatization for two countries—China and Hungary—and drew some general lessons for these studies for the EEs participating in the workshop.[1]

China's National Petroleum Company

2.2 The drivers of change for the CNPC were primarily the company's need to raise external funds, a government reform program, and the prospect that China would have to import oil. The specific objectives are to develop reserves and increase

1. This section reflects the views of a consultant specialist in the privatization and restructuring of state oil and gas enterprises.

production, raise external funds, develop management skills, implement a regulatory framework for the oil and gas industry, and transform the company into a commercially operating entity.

2.3 The focus of the case study was on rationalizing the relationships between CNPC and the state. In the area of policymaking, reforms took place in certain areas, such as onshore licensing and pricing, but significant reforms are still required—especially in further price liberalization, in oil and gas transportation policies, and in creating incentives to promote competition. The regulatory framework involves too many agencies. It also lacks specialist expertise and has an inadequate legal basis. Change is necessary to bring about greater independence, transparency, and predictability, efficiency incentives, and streamlined procedures for foreign investors.

2.4 The ownership and management of CNPC are complicated by the involvement of too many agencies with cumbersome procedures, combined with the lack of a company incentive structure. These conditions limit the ability of the company to operate as a commercial entity. A coherent strategy for managing CNPC in a liberalized economy is necessary, along with reduced day-to-day involvement of the government in the company's operations. The restructuring has benefited from full participation by CNPC as well as from international expertise and experience. However, the limitations on progress are the cumbersome ownership structure and lack of familiarity in working with consultants.

The Hungarian National Oil and Gas Company

2.5 Several major factors propelled the restructuring of the country's national oil and gas company, MOL Rt.: overstaffing, a high cost structure, weak management capability, lack of common vision as a corporate entity, and inability to respond to market changes. The company was rapidly losing its market shares to multinationals. Its oil and gas production was falling rapidly, it had overcapacity in refining, and it lacked an information system for strategic planning and management.

2.6 Hungary's economy was suffering and needed privatization revenues, but the government did not clearly delineate its roles as company owner and regulator. A key factor that inhibited progress was the lack of pressure from the government to drive the changes needed. The government lacked understanding of the pressures facing the company and was not prepared to face the consequences of implementing the restructuring process. Within the company, infighting and fear of losing control were barriers to understanding and to the process of change needed.

2.7 Consultant specialists convinced management of the company's desperate position, helped redesign functions and departments, and established strategic planning and management information systems. However, essentially the lack of an external threat that is greater than the pain of change has constrained progress. Company management still does not indicate a sense of urgency for change, employs far too many staff, has not yet reached agreement on a date for privatization, and continues to lose market advantage.

Summary of Lessons from Case Studies

2.8 The most important lesson is that all parties involved in privatization and restructuring must be convinced of the need for change, with a clear vision of what they want to achieve. It is also necessary to plan in phases, with clear objectives and milestones. Governments need to overcome their entrenched monopoly positions and develop a clear regulatory and pricing framework before privatization. At the company level, management must accept the responsibility for change, including risks and mistakes. Consultant experts in restructuring and privatization must be able to customize solutions, maintaining an awareness of communication barriers. International lending agencies should be aware of the need for flexible terms of reference to cope with evolving issues in the diagnostic phase of a restructuring and privatization project.

3

The Privatization Experience of Selected Countries Participating in the Workshop

3.1 During the workshop a number of participants provided brief assessments of the status of privatization in their countries, and some expressed concerns about the next steps in the process. The following sections summarize their comments.

China

3.2 China has opted for an evolutionary approach to allowing private sector participation in the oil and gas industry and restructuring the national petroleum corporation. A major concern in company restructuring is how to handle the social burden of labor-shedding, noting that the social obligation that the government has imposed on the company has adversely affected the company's production and incentive to grow.

The Czech Republic

3.3 The Czech Republic has transferred a number of oil and gas companies to a state holding company for privatization. The government is looking for investors and is concerned about improving sector efficiency and reducing maintenance problems. A participant from the country expressed interest in seeking advice on the most appropriate way to implement energy policy and in hearing views on build, lease, and transfer schemes.

India

3.4 In India, public ownership of the oil and gas sector has served the country well, building a strong technical capability and viable sector institutions. But beginning in the early 1980s, a fiscal crisis caused the country to look carefully at privatization as a viable means for attracting additional capital the country needed to meet the development objectives of its oil and gas sector. The country's privatization process is focusing on making the public system operate as a private enterprise and allowing private companies to compete with the public sector in specific areas.

3.5 Ultimately, the government of India's share of ownership in the sector is likely to be on the order of 40 to 50 percent. The government's gradual approach to privatization has helped allay some of the concerns about the process, such as massive job loss in the public sector. The government has focused on incentives to attract private capital from domestic as well as foreign sources. A large number of Indian companies already have entered into partnership with foreign oil companies, especially in upstream activities.

Indonesia

3.6 There is a strong possibility that the government of Indonesia will privatize the gas industry in the next couple of years. This privatization is likely to be partial, with the government retaining about 60 percent of its ownership shares. The government is looking for financing to construct a domestic gas pipeline in a strategy to substitute gas for oil in the domestic market. Since a domestic gas pipeline may not be attractive to private foreign investors, the government feels that it will have to rely on financing from international development institutions such as the Asian Development Bank and the World Bank.

Korea

3.7 Korea already has a private oil industry, which operates as an oligopoly. The country is concerned about the best way to privatize its gas industry and assure a fair price for gas. The government is approaching the privatization process with the use of an economic model that maximizes consumer welfare, establishes linkages between the oil and gas industry and other industries, and provides an impact analysis of the privatization on the economy.

Romania

3.8 In Romania, the oil industry began to decline in the mid-1980s because of several factors: rapid, extensive extraction of oil wells and gas deposits, the lack of modern extraction methods and related high-quality equipment, and the low level of reserves identified because of outdated exploration equipment. The declines made the country a net importer of gas. The government has made a decision to move toward a market economy, and, in this regard, the main issues in the oil and gas sector are the critical need for investment capital to reverse production declines and improve infrastructure maintenance, increased autonomy and commercial orientation of sector entities through restructuring, and the creation of a commercial environment that encourages private investment in the sector through an appropriate legal framework.

3.9 The government of Romania has drafted a petroleum law to regulate matters such as field concessions, producer pricing, and royalties. Also, the government has liberalized consumer energy prices and will make frequent adjustments to maintain them at world market levels. Finally, the government has begun to restructure several state oil and gas companies. The management of each company that is subject to restructuring must sign a management contract with the government, submit a restructuring and privatization plan, divest itself of noncore activities, take measures to enhance oil and gas production and rehabilitate facilities, and address environmental issues in the sector.

Russia

3.10 In Russia, the first phase of the privatization process for the oil and gas sector—voucher auctions and review of a draft legal framework—is complete. In the second phase, the country will face the pressing problem of obtaining investment resources needed to modernize and expand production. Also, it will be necessary to negotiate new commercial supply contracts to replace the intergovernmental agreements that were the bases of supply under the command economy.

3.11 The main principles of Russia's restructuring program for the petroleum sector are as follows: (a) the creation of large, vertically integrated enterprises; (b) preservation of the existing integrated system of trunk lines with free, nondiscriminatory access to them by all producers; (c) maintenance of existing unified complexes for production, refining, and marketing of petroleum; and (d) retention of state monitoring and management of the fuel and energy complex. This structural transformation will take place during 1994–96.

3.12 To date, the transformation of enterprises into joint-stock companies is complete. A portion of stock has been assigned temporarily to federal ownership. As much as 40 percent of the stock has been turned over to members of worker collectives. The rest of stock will be sold in auctions. Domestic and foreign investors may participate in cash auctions, and no restrictions are put on stock acquisition by foreigners. The government has taken steps to create conditions that will attract foreign investment; for example, the Law on Mineral Resources provides unrestricted access to the development of fuel and energy resources, and a presidential decree contains provisions for assuring the stability of business conditions.

Slovak Republic

3.13 The country is concerned with its high energy intensity and the need for greater efficiency in the sector. The Republic's privatization policy provides for the government to remain the major shareholder but with a substantial reduction of its share.

Thailand

3.14 The national oil and gas company of Thailand was operating well with no serious financial problems but decided on privatization to help the company raise its performance to the level of a world-class oil and gas company. The management recognized that it needed privatization to become more competitive and capable of adapting to changing market conditions. In preparing for privatization, the company's approach was to build its technical and financial capabilities as much as possible to maximize the company's value at the time of sale.

4

Financing Oil and Gas Sector Development

Key Points

- EEs cannot rely entirely on the lending programs of international development institutions to meet the bulk of their investment needs.
- The development of domestic capital markets is essential to help finance the key investment needs of the sector. However, this is a long-term goal for many EEs, which in the near and medium term will continue to rely on external financing for the capital necessary for oil and gas development.
- For a large number of EEs, special financing mechanisms are necessary to secure debt capital from private foreign sources because of sovereign risks.
- Multilateral development institutions will need to continue to adjust their financing instruments to help EEs mobilize the required financial resources for their oil and gas sectors.

Investment Needs

4.1 Investment requirements for the oil and gas sector in EEs are roughly US$100 billion annually. Many EEs are looking to international development institutions to help them finance investment costs. Official development institutions will be able to contribute only about 5 to 10 percent of this amount. The rest will have to come from domestic resources and foreign private resources.

Restrictions of the Domestic Capital Market

4.2 Many EEs do not have sufficiently developed capital markets to provide the private financing needed for oil and gas sector investments. The World Bank and other international development agencies are working with many EEs to improve their macroeconomic performance and develop domestic capital markets. However, this development will take a considerable amount of time. Many countries need to rely on foreign investment sources as well as technical know-how.

Limitations on Private Financing Sources

4.3 Recent trends toward privatization of the oil and gas sector, especially in Eastern Europe, Russia, and the Central Asian Republics, have increased world demand for private sector funds. For a number of countries, access to private financing sources is not limited by resource availability but by the risks perceived by potential investors. Among these risks are nationalization of assets, difficulties in obtaining payments in foreign currency, wars, civil strife, and breach of contract by the government or state entities.

Improvements to the Domestic Business Framework

4.4 Many countries will have to improve the domestic business environment to attract both foreign and domestic private investor involvement in the oil and gas sector. From the investor perspective, this will require policies and regulations to ensure transactions at international market prices; the freedom to move oil and gas; and the ability to repatriate investment funds and profits. However, many EEs are only just beginning to improve their domestic business environment, and it will be a long time before they will be able to instill complete investor confidence.

The Need for Special Financing Mechanisms

4.5 The term *special financing* refers to financing mechanisms that mitigate the political risks of foreign private investors in a given country. Most of the financial instruments in the portfolios of international development institutions have been loans; a relatively small number of guarantees have been offered to commercial lenders/investors for public and private sector projects in EEs. Large investments required in the oil and gas sector will necessitate new ideas for financing instruments.

4.6 Guarantees are an important type of special financing for two principal reasons. First, they provide a measure of comfort to private investors and act as a catalyst for attracting private sector funds; second, they are flexible instruments, either complementing commercial financing or targeting specific risks. Increased prospects for private sector cofinancing have resulted from the globalization of financial markets and the growing emphasis on private operation of activities formerly dominated by the public sector such as energy and infrastructure.

Special Financing Mechanisms Available from the World Bank Group

4.7 The World Bank Group offers special financing through its affiliates, the Multilateral Investment Guarantee Agency (MIGA), the Expanded Co-Financing Program (ECO), and the International Finance Corporation (IFC). According to its mandate, MIGA can only insure new investments, including the expansion of existing facilities, privatization, and financial restructuring. MIGA can insure up to 90 percent of the investment amount, subject to a limit of US$50 million per project. Guarantees from the Bank's ECO program fall into two main categories: (a) partial guarantees covering comprehensive credit risk; and (b) guarantees linked to specific sovereign risks such as political force majeure, currency transfer, the failure of a government to fulfill contractual obligations.

4.8 Another form of special financing is the lending program of the IFC, which provides financing to private sector entities in EEs. The IFC does not provide guarantees to private investors, but its participation in the project financing alongside other financiers often instills investor confidence because of the IFC's reputation for careful analysis and insistence on certain prerequisites in the business environment, such as (a) secure access to the resource base under development; (b) market pricing; (c) transparency and stability of tax and other regulations; (d) profit-based ad valorem taxes instead of fixed royalties; (e) freedom to manage the enterprise within a clear, consistent environmental and business framework; and (f) the ability to remit profits, make foreign payments, and manage currency risk, as required.

5

The Potential for Oil and Gas Trade in the Asia Region

Key Points

- The growing, industrialized EEs of the Asia region have major, long-term market prospects for oil and gas, and the development of oil and gas trade with Central Asia could benefit the economies of producers, consumers, and transit countries.
- Oil and gas trade within the Asia region will require multilateral investment projects and new institutional structures.
- Several trade options are under consideration in the international community, but a considerable amount of preinvestment work is required to establish their viability.
- Multilateral development institutions could play a catalytic role in facilitating trade development within the Asia region by promoting the necessary preinvestment work by individual countries and private sector entities.

Growing Regional Energy Markets

5.1 Energy demand in the Asia region is growing faster than that of any other region in the world. The main markets are China, Japan, the Philippines, South Korea, Taiwan, and Vietnam. Incremental oil demand from China, for example, projected at 200 million tons per year (mtpy) in 2010, is expected to be double that of the South Asian countries as a group (100 mtpy) and account for about 70 percent of incremental demand of all East Asian countries combined (280 mtpy). In addition, the combined demand for natural gas in Japan, Korea, and Taiwan is expected to increase from about 60 billion cubic meters (bcm) at present to roughly 112 billion bcm by 2010.

Expected Trade Benefits

5.2 Most of the major Asian importers of oil and gas depend on the Middle East for much of their oil supply and on Indonesia to meet a large portion of their natural gas needs. Over the long term, imports of oil and gas from Central Asia by the major regional energy-consuming countries in Asia could have benefits for supply diversification and security. For the countries with large oil and gas reserves, such as Azerbaijan, Kazakhstan, Russia, Turkmenistan, and Uzbekistan, oil and gas trade would provide much-needed foreign exchange for the development of their emerging market economies. Transit countries would benefit from royalties received.

Need for New Institutional Structures

5.3 Multilateral investment projects for regional oil and gas trade would involve the creation of an appropriate institutional framework. This framework should include investment protection treaties, assurances of fiscal stability, mechanisms for resolving transjurisdictional disputes, market-driven pricing mechanisms, harmonization of technical standards, and guarantees for the repatriation of profits.

Need for Major Preinvestment Work

5.4 Studies are required to examine prospective markets for oil and gas and production available for export, prepare an economic analysis of costs and benefits, recommend an appropriate institutional and regulatory framework, create a long-term contractual model (including the assessment of transit fees), recommend an operational structure for oil and/or gas transport, prepare a preliminary environmental impact assessment, and determine the specific needs of Central Asian countries to attract private investment in production and transport infrastructure.

A Special Role for Multilateral Development Institutions

5.5 The World Bank and other multilateral development institutions can play a special role in facilitating transnational projects by identifying and commissioning studies to address specific issues of transnational concern. In addition, the World Bank could organize and chair multilateral working groups with representatives from the public and private sectors to discuss specific oil and gas trade issues. The groups could also serve as a review panel for major studies associated with trade development.

6

Follow-up Activities to the Workshop

Privatization Practice

6.1 The main concerns that emerged from the discussions on privatization were how to best go about privatization, especially what the appropriate role of the state should be; how to handle the socioeconomic aspects of the labor shedding that often results from restructuring; and the need to develop domestic capital markets and improve the overall business environment. An effective way of addressing these concerns could be for officials in the oil and gas sector of EEs in the initial phases of privatization to visit countries that have successful privatization experience and discuss this experience on an informal, first-hand basis. The World Bank has helped facilitate such an arrangement between Argentina and China.

Special Financing Mechanisms

6.2 Many of the workshop's participants expressed concern about oil and gas sector financing and look to the World Bank for solutions to meet the financing gap between what they can provide and what multilateral development institutions will be able to finance. In this regard, the Bank has now introduced a guarantee mechanism that is expected to facilitate private sector financing of oil and gas projects. Also, the Bank is looking into mechanisms to mobilize "non-dollar-based" private sector funds.

Development of Oil and Gas Trade in the Asia Region

6.3 The workshop's discussions of trade in the Asia region pointed to the need for preinvestment studies and the formation of multilateral working groups to facilitate multilateral decisionmaking on trade development. As a first step toward the assessment of trade development in the Asia region, the Bank has launched a study to evaluate options for exporting oil and gas from Central Asian countries. An initial desk study will assess oil and gas demand and supply; explore possible export schemes to markets in Europe, Turkey, and Asia; evaluate the status of existing oil and gas transport infrastructure and identify additional infrastructural requirements; summarize the status of future project discussions and major bottlenecks; and prepare a concrete proposal for a second-stage study.

6.4 Parallel to the initial study will be the formation of a steering committee and workshops to assist in determining the most appropriate investment options for transnational oil- and/or gas-related infrastructure projects between Central Asia and other regions. Subject to the findings of the desk study and discussions with steering committee members, a second-stage study will cover pricing contracts and financing for new gas export markets and preinvestment evaluations for gas exports to China and oil exports to Far East markets.

Annex 1: Workshop Agenda

OIL AND GAS PRIVATIZATION WORKSHOP IN TOKYO
JUNE 16–17, 1994

Organized by
Oil and Gas Division, Energy and Industry Department, World Bank, and
Co-Financing & Financial Advisory Services, World Bank

Co-Sponsored by
The Export-Import Bank of Japan

THURSDAY, JUNE 16

08:45 - 09:30 Registration and Distribution of Conference Materials

09:30 - 09:45 **Welcoming Statement and Introduction**

- Mr. Richard Stern, Director, Energy and Industry Department, The World Bank, Workshop Chairman

09:45 - 10:00 **Keynote Address**

- Mr. Masahiko Agata, Special Advisor to the Governor, The Export-Import Bank of Japan, Tokyo, Japan

10:00 - 10:30 Coffee Break

10:30 - 12:00 **Session 1: Structure of the Oil and Gas Sector in the Emerging Economies (EEs) and Privatization**

- Mr. C. Brierley: "Privatization of the Oil and Gas Sector in Emerging Economies" (30 minutes)

Oil & Gas Regional Issues and Prospects in Asia & Pacific Rim

- Mr. S. Sadiq, Director, Energy & Industry Department, Asian Development Bank (20 minutes)

International Oil Companies' Views

- Mr. E. B. Scott III, Vice President, Negotiations & Contracts, Chevron Overseas Petroleum Inc. (10 minutes)

EEs' Views

Developments in Restructuring of Russian Oil Industry

- Mr. Vladimir Nosov, Head of the Department, Ministry of Fuel and Energy Resources, Russia (15 minutes)
- Mr. Vladimir Rezunenko, Member of the Board, Russian Joint-Stock Company, GASPROM (15 minutes)

12:00 - 12:40 **Workshop Discussions**

- Moderator: Mr. Jonathan Brown, Chief, Infrastructure/Energy/ Environment Division, The World Bank

12:40 - 14:10 Lunch

14:10 - 15:20 **Session II: The Role of Special Financing and its Prerequisites and Limitations**

- Mr. M.A.K. Alizai, Director, Oil, Gas & Mining Department, IFC (25 minutes)

The Use of World Bank Guarantees for Private Sector Participation

- Mr. Suman Babbar, Principal Operations Officer, Co-Financing and Financial Advisory Services, World Bank (25 minutes)

International Oil Companies' Views

- Mr. Petter Nore, Vice President, SAGA Petroleum (10 minutes)

EEs' Views

- Dr. A. Qoyum, President Director, Perusahaan Umum Gas Negara, Jakarta, Indonesia (10 minutes)

15:20 - 16:00 **Workshop Discussions**

16:00 - 16:15 Coffee Break

16:15 - 17:05 **Session III: How Important Is the Legal and Regulatory Framework?**

- Mr. D. Bardin, Partner, Arent Fox (20 minutes)

Private Sector's Views

- Mr. Masaaki Hayakawa, General Manager of Energy Division I, Marubeni Corporation (5 minutes)
- Mr. Toyomitsu Tamao, Managing Director, Nomura Research Institute (5 minutes)

17:05 - 17:45 **Workshop Discussions**

- Moderator: Mr. Akin Oduolowu, Principal Energy Specialist, Industry, Trade & Finance Operations Division, The World Bank

FRIDAY, JUNE 17

09:00 - 09:15 **Discussion of the Workshop Dynamics**

- Mr. Mohsen Shirazi, Senior Gas Specialist, Workshop Task Manager

09:15 - 10:15 **Session IV: Lessons from Restructuring and Privatization, Country Examples**

- Dr. Michael F. Horder, Partner Oil and Gas Sector, Coopers & Lybrand (45 minutes)

International Oil Companies' Views

- Mr. Howard Karren, Vice Chairman, Enron Exploration Company (15 minutes)

EEs' Views

- Mr. T.S.R. Rao, Secretary, Ministry of Petroleum and Natural Gas, India (15 minutes)

10:15 - 10:30 Coffee Break

10:30 - 12:00 **Workshop Discussions**

- Moderator: Mr. Akin Oduolowu, Principal Energy Specialist, Industry, Trade & Finance Operations Division, The World Bank

12:00 - 13:30 Lunch in the Dining Room on 5th Floor hosted by The Export-Import Bank of Japan

13:30 - 14:45 **Session V: Potential for Oil and Gas Trade in Far East and Central Asia and Middle East**

- Mr. John C. Wood-Collins, Vice President, Arthur D. Little (45 minutes)

EBRD's Views

- Mr. Ken Tanimura, Senior Project Manager, Financial Infrastructural Department (15 minutes)

Private Sector's Views

- Mr. Masayoshi Kuboi, Deputy General Manager, LNG Business Development Department, Mitsubishi (15 minutes)

14:45 - 15:30	**Workshop Discussions**	
	• Moderator: Mr. Jonathan Brown, Chief, Infrastructure/ Energy/ Environment Division, The World Bank	
15:30 - 16:00	Coffee Break	
16:00 - 17:30	**Closing Session**	
	• Participants' Views	
	• Closing Statements: Messrs. Richard Stern/Inder Sud/M.A.K. Alizai	

Workshop Location:

The Conference Room on the 9th Floor
The Export-Import Bank of Japan
4-1 Ohtemachi 1-Chome, Chiyoda-ku
Tokyo 100, Japan
Tel: (81-3) 3287 9097
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Annex 2: Participant List

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India	**Mr. S. K. Manglik** Chairman cum Managing Director Oil & Natural Gas Corp. Ltd. 9th Floor, Jeevan Bharati Tower-II, 124, Connaught Circus New Delhi 110 001 India Tel: 91-11-3323402/3320973 Fax: 91-11-3313028

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Participants (continued)

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Participants (continued)

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The World Bank Group **IBRD**	 **Mr. Richard Stern** **(Workshop Chairman)** Director Industry & Energy Department **Mr. Christopher Brierley** **(Speaker Session I)** 6 Stobarts Close Knebworth Hertfordshire England SG3 6ND United Kingdom Tel : (44-438) 814988 Fax: (44-438) 814988 **Mr. Jonathan Brown** **(Moderator Session I&V)** Division Chief Infrastructure/Energy/Environment Division **Mr. Suman Babbar** **(Speaker Session II)** Principal Operations Officer Co-Financing & Financial Advisory Services **M. Akin Oduolowu** **(Moderator Session III & IV)** Principal Energy Specialist Industry, Trade & Finance Operations Division

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	Mr. Bent Svensson Energy Economist Oil & Gas Division Industry & Energy Department
	Mr. Shigeru Kubota Oil & Gas Specialist Oil & Gas Division Industry & Energy Department
IFC	**Mr. M.A.K. Alizai (Speaker Session II)** Director Oil, Gas & Mining Department

Energy Publications

Industry and Energy Department Working Papers
Energy Series Papers

Numbers 1 to 59, 1988 to 1992

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14 Churchill, Anthony A., and Robert J. Saunders. 1989. "Financing of the Energy Sector in Developing Countries." Energy Series Paper 14. World Bank, Industry and Energy Department, Washington, D.C.

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16 Openshaw, Keith, and Charles Feinstein. 1989. "Fuelwood Stumpage: Considerations for Developing Country Energy Planning." Energy Series Paper 16. World Bank, Industry and Energy Department, Washington, D.C.

17 Crousillat, Enrique O. 1989. "Incorporating Risk and Uncertainty in Power System Planning." Energy Series Paper 17. World Bank, Industry and Energy Department, Washington, D.C.

18 Sanghvi, Arun, and Robert Vernstrom, with John Besant-Jones. 1989. "Review and Evaluation of Historic Electricity Forecasting Experience (1960-1985)." Energy Series Paper 18. World Bank, Industry and Energy Department, Washington, D.C.

19 Teplitz-Sembitzky, Witold, and Gunter Schramm. 1989. "Woodfuel Supply and Environmental Management." Energy Series Paper 19. World Bank, Industry and Energy Department, Washington, D.C.

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21 Moore, Edwin A., and George Smith. 1990. "Capital Expenditures for Electric Power in the Developing Countries in the 1990s." Energy Series Paper 21. World Bank, Industry and Energy Department, Washington, D.C.

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28 Gaunt, John, and Neil J. Numark, with Achilles G. Adamantiades. 1990. "Decommissioning of Nuclear Power Facilities." Energy Series Paper 28. World Bank, Industry and Energy Department, Washington, D.C.

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34 Suzor, Norland C., and P. E. Bouvet. 1991. "Identifying the Basic Conditions for Economic Generation of Public Electricity from Surplus Bagasse in Sugar Mills." Energy Series Paper 34. World Bank, Industry and Energy Department, Washington, D.C.

35 Moore, Edwin, and Enrique Crousillat. 1991. "Prospects for Gas-Fueled Combined-Cycle Power Generation in the Developing Countries." Energy Series Paper 35. World Bank, Industry and Energy Department, Washington, D.C.

36 Adamantiades, Achilles G., and Spyros Traiforos. 1991. "Radioactive Waste Management: A Background Study." Energy Series Paper 36. World Bank, Industry and Energy Department, Washington, D.C.

37 McKeough, Kay, Energy Security Analysis, Inc., and Petroleum Economics, Ltd. 1991. "A Study of the Transfer of Petroleum Fuels Pollution." Energy Series Paper 37. World Bank, Industry and Energy Department, Washington, D.C.

38 Feinstein, Charles, and Robert van der Plas. 1991. "Improving Charcoaling Efficiency in the Traditional Rural Sector." Energy Series Paper 38. World Bank, Industry and Energy Department, Washington, D.C.

39 Crousillat, Enrique, and Spiros Martzoukos. 1991. "Decision Making Under Uncertainty: An Option Valuation Approach to Power Planning." Energy Series Paper 39. World Bank, Industry and Energy Department, Washington, D.C.

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48 Ryan, Paul, and Keith Openshaw. 1991. "Assessment of Biomass Energy Resources: A Discussion on its Need and Methodology." Energy Series Paper 48. World Bank, Industry and Energy Department, Washington, D.C.

49 Peskin, Henry M., Willem Floor, and Douglas F. Barnes. 1992. "Accounting for Traditional Fuel Production: The Household-Energy Sector and Its Implications for the Development Process." Energy Series Paper 49. World Bank, Industry and Energy Department, Washington, D.C.

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A Note to Readers

The Industry and Energy Department (IEN) "pink" Energy Series Papers ends with number 59, the last before the World Bank's 1992 reorganization. Beginning in 1993, IEN is issuing some papers for relatively limited distribution in a new IEN Occasional Papers series. At the same time, IEN is publishing energy reports of more widespread interest in a new Energy Series within the ongoing World Bank Technical Papers, which enables the department to take advantage of the World Bank's global distribution network. Note that the numbering of the Energy Series Technical Papers follows that of the World Bank Technical Papers Series and thus may not be continuous.

Industry and Energy Department Occasional Papers

1993 –

1 World Bank and Electricité de France. 1993. "Power Supply in Developing Countries: Will Reform Work? Proceedings of a Roundtable." Occasional Paper 1. World Bank, Industry and Energy Department, Washington, D.C.

2* World Bank and USAID. 1994. "Submission and Evaluation of Proposals for Private Power Generation in Developing Countries." Occasional Paper 2. World Bank, Industry and Energy Department, Washington, D.C.

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*The "Checklist for Improving Electric Power Utility Efficiency," listed in Occasional Paper No. 1 as Occasional Paper No. 2, was instead issued as an unnumbered reprint of the annex to World Bank Technical Paper 243.

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Energy Series

1994 –

240 Ahmed, Kulsum. 1994 *Renewable Energy Technologies: A Review of the Status and Costs of Selected Technologies.* World Bank Technical Paper 240. Washington, D.C.

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